REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 20-31 are presently active. Claims 20, 25, 30, and 31 have been amended by the present amendment. Support for the amendments to Claims 20, 25, 30, and 31 can be found at least from page 14, line 5, to page 15, line 5; and in Figure 1 (transport packets) of Applicants' specification. No new matter has been added by the present amendment.

In the Office Action, Claims 20-24 were rejected under obviousness-type double patenting as unpatentable over Claim 5 of Ando et al. (U.S. Patent No. 6,373,803; hereinafter "Ando") in view of Saeki et al. (U.S. Patent No. 6,078,727; hereinafter "Saeki") and Lenihan et al. (U.S. Patent No. 6,169,843; hereinafter "Lenihan"). Claims 25-29 were rejected under obviousness-type double patenting as unpatentable over Claim 1 of Ando in view of Saeki and Lenihan. Claims 30 and 31 were rejected under obviousness-type double patenting as unpatentable over Claim 1 of Ando in view of Saeki. Claims 30 and 31 were rejected under 35 U.S.C. §102(e) as anticipated by Saeki. Claims 20-29 were rejected under 35 U.S.C. §103(a) as unpatentable over Saeki in view of Lenihan.

Regarding the rejection of Claims 20-24 under obviousness-type double patenting, Applicants respectfully submit that these claims are patentably distinguishable over Claim 5 of Ando in view of Saeki and Lenihan. Amended Claim 20 recites, among other features, an information *recording* method using an information medium onto which object data of stream data is recorded, where the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units.

In contrast to amended Claim 20, Claim 5 of Ando recites a method for *reading out* bitstream information recorded on an information medium, which is the opposite function of

recording information onto an information medium. Amended Claim 20 includes a step of receiving stream data and a step of recording stream data, whereas Claim 5 of Ando includes four steps of reading information from an information medium. For this reason alone, amended Claim 20 is patentably distinct from Claim 5 of Ando, regardless of any other teachings known in the art that may be obviously combinable with Claim 5 of Ando.

However, Claim 5 of Ando also does not recite data units each including transport stream packets and information indicating an arrival time of a first packet of one of the data units, and Applicants respectfully submit that these features are not an obvious variation of the invention defined by Claim 5 of Ando. Further, neither Saeki nor Lenihan provide teachings to demonstrate obviousness of these features with respect to Claim 5 of Ando.

For example, Saeki does not include any discussion with regards to stream data, to the use of data units including transport stream (TS) packets, or to information indicating an arrival time of a first packet of one of the data units. Rather, Saeki is directed to a data structure including non-TS video object data.[1] Also, while Lenihan is directed to the recording and playback of transport stream packets,[2] Lenihan does not disclose a data unit including information indicating an arrival time of a first packet of a data unit. Instead, Lenihan only teaches the generation of an arrival timestamp (ATS) for a "given transport packet identified as suitable for recording,"[3] and not for a first packet of a data unit, as recited in amended Claim 20.

Therefore, neither Saeki nor Lenihan provide teachings that would have been obvious modifications of Claim 5 of Ando to arrive at amended Claim 20. As such, amended Claim 20 and its dependent Claims 21-24 are patentably distinct from the subject matter claimed in Claim 5 of Ando and disclosed in Saeki and Lenihan.

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[1] see, e.g., Saeki at col. 2, lines 36-40.
[2] see, e.g., Lenihan at col. 5, lines 40-57.
[3] Lenihan at col. 7, lines 34-38.

Regarding the rejection of Claims 25-29 under obviousness-type double patenting, Applicants respectfully submit that these claims are patentably distinguishable over Claim 1 of Ando in view of Saeki and Lenihan. Claim 25 recites, among other features, an information medium including a data area for recording object data of the stream data using transport stream packets, where one of the data units is larger than one of the transport stream packets. The information medium also includes a management area for recording management information of the object data, where a data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units.

In contrast, Claim 1 of Ando recites an information medium including, in relevant part:

> ...a stream object, formed of the bitstream information, including at least one first data unit, at least one second data unit having the at least one first data unit, and at least one third data unit having the at least one said second data unit, the at least one third data unit storing header information relating to the at least one first data unit in the at least one third data unit.

Claim 1 of Ando does not recite a data area, a management area, or a data structure as claimed in amended Claim 25. Specifically, Claim 1 of Ando does not recite 1) the recording of object data of stream data using transport stream packets, where one of multiple data units is larger than one of the transport stream packets; 2) a management area for recording management information of the object data; or 3) a data structure in which each one of the data units includes the transport stream packets and information indicating an arrival time of a first packet of one of the data units. Further, Applicants respectfully submit that these features are not an obvious variation of the invention defined by Claim 1 of Ando, and that neither Saeki nor Lenihan provide teachings to demonstrate obviousness of all these features with respect to Claim 1 of Ando. For example, as discussed above with respect to amended

10

Claim 20, neither Saeki nor Lenihan teach or suggest each data unit including transport stream packets and information indicating an arrival time of a first packet of one of the data units.

Therefore, neither Saeki nor Lenihan provide teachings that would have been obvious modifications of Claim 1 of Ando to arrive at amended Claim 25. As such, amended Claim 20 and its dependent Claims 26-29 are patentably distinct from the subject matter claimed in Claim 1 of Ando and disclosed in Saeki and Lenihan.

Regarding the rejection of Claims 30 and 31 under obviousness-type double patenting, Applicants respectfully submit that these claims are patentably distinguishable over Claim 1 of Ando in view of Saeki. Amended Claim 30 recites an information *recording apparatus* using an information medium that uses a data structure that organizes object data as one or more of the data units included in stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units. Amended Claim 31 recites an information *reproducing apparatus* using an information medium with the same features as described in Claim 30.

In contrast, Claim 1 of Ando is directed solely to an information *medium*, and not to an apparatus, either for information recording or reproducing. As such, the phrase "the device of claim 1 of U.S. Patent No. 6,373,803," as indicated in the third full paragraph of page 9 of the Office Action, is incorrect. For this reason alone, amended Claims 30 and 31 are patentably distinct from Claim 1 of Ando, regardless of any other teachings known in the art that may be obviously combinable with Claim 1 of Ando. In other words, it would not have been obvious to an ordinarily-skilled artisan at the time of Applicants' present invention to incorporate, for example, the apparatus blocks recited in amended Claims 30 and 31 with the information medium recited in Claim 1 of Ando. This is because an ordinarily-skilled

artisan would have recognized that an information medium cannot be modified to include *apparatus* blocks, regardless of the teachings of Saeki and Lenihan.

Therefore, neither Saeki nor Lenihan provide teachings that would have been obvious modifications of Claim 1 of Ando to arrive at amended Claims 30 and 31. As such, amended Claims 30 and 31 are patentably distinct from the subject matter claimed in Claim 1 of Ando and disclosed in Saeki and Lenihan.

Regarding the rejection of Claims 30 and 31 under 35 U.S.C. §102(e), Applicants respectfully submit that Saeki does not disclose each and every feature of these claims. For example, both amended Claims 30 and 31 recite apparatuses that use:

> ...an information medium for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units...
> ...the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units...

In contrast, as discussed above with respect to the obviousness-type double patenting rejection of Claim 20, Saeki does not disclose an information medium for recording stream data using transport stream packets and data unit, or that each data unit includes transport stream packets and information indicating an arrival time of a first packet of one of the data units. Therefore, Saeki does not disclose each and every feature of amended Claims 30 and 31 and, as such, fails to anticipate these claims.

Accordingly, Applicants respectfully submit that amended Claims 30 and 31 are patentable over Saeki, and request reconsideration and withdrawal of the rejection of Claims 30 and 31 under 35 U.S.C. §102(e).

Regarding the rejection of Claims 20-29 under 35 U.S.C. §103(a), Applicants respectfully submit that Saeki and Lenihan do not disclose or teach these claims. As discussed above regarding the obviousness-type double patenting rejections of these claims, both independent Claims 20 and 25 recite, among other features, a data structure that

organizes object data of stream data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units.

As discussed above, Saeki is not directed to the recording or reproducing of stream data using transport stream packets, and further does not disclose data units including transport stream packets and information indicating an arrival time of a first packet of one of the data units. The Office Action turns to the teachings of Lenihan to remedy the deficiencies of Saeki with respect to the rejected claims; however, as discussed above, Lenihan also fails to disclose a data unit including information indicating an arrival time of a first packet of one of the data units. Again, Lenihan only teaches the generation of an arrival timestamp (ATS) for a "given transport packet identified as suitable for recording,"[4] and not for a first packet of a data unit, as recited in the rejected claims.

Further, it would not have been obvious to an ordinarily-skilled artisan at the time of Applicants' invention to modify the teachings of Saeki with those of Lenihan. As discussed above, Saeki is directed to a data structure including non-TS video object data,[5] while Lenihan is directed to the recording and playback of TS packets.[6] As such, there would have been no motivation for one familiar with Saeki to look to a TS-based system, such as the one disclosed in Lenihan, for the features of data unit including transport stream packets and information indicating an arrival time of a first packet of one of the data units. Saeki and Lenihan certainly provide no such motivation.

Accordingly, Applicants respectfully submit that amended Claims 20 and 25, and their dependent claims, are patentable over Saeki and Lenihan, and request reconsideration and withdrawal of the rejection of Claims 20-29 under 35 U.S.C. §103(a).

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[4] Lenihan at col. 7, lines 34-38.
[5] see, e.g., Saeki at col. 2, lines 36-40.
[6] see, e.g., Lenihan at col. 5, lines 40-57.